

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A polymeric composition comprising at least one acrylic copolymer constituted of 90 to 99 mole-% of acrylic (AC) monomer units and of at least one water-soluble comonomer unit.
2. (Original) Composition according to claim 1 comprising at least one acrylonitrile copolymer constituted of 90 to 99 mole-% of acrylonitrile (AN) monomer units and of at least one water-soluble comonomer unit.
3. (Currently Amended) Composition according to claim 1 or 2, wherein the comonomer is an ionic monomer, particularly an anionic monomer.
4. (Original) Composition according to claim 3, wherein the comonomer is 2-acrylamido-2-methyl-propane sulfonic acid (AMPS).
5. (Original) Composition according to claim 3, comprising AMPS with a molar content in the copolymer of 1 to 10 mole-%, particularly of 3 to 5 mole-%.
6. Canceled.
7. Canceled.
8. Canceled.
9. Canceled.
10. Canceled.
11. (Currently Amended) ~~Use of a composition according to claims 1 to 5 for producing materials being used in medical or biological applications~~ Material for use in

medical or biological applications comprising a polymeric composition according to claim 1
involving a direct contact of the material with fluids and/or cells and/or tissues.

12. (Currently Amended) ~~Use~~ Material according to claim 11, wherein the material is a membrane, a film or a surface coating.

13. (Currently Amended) ~~Use~~ Material according to claim 11 ~~or 12~~, wherein the material is employed as support for cells, particularly tissue cells, the cells being in contact with a fluid stream, which supplies the cells with nutrients and enables exchange of substances into the cells and outside the cells.

14. (Currently Amended) ~~Use~~ Material according to claim 13, wherein the same the tissue cells are hepatocytes.

15. (Currently Amended) ~~Use~~ Material according to ~~any one of the preceding~~ claims 11 ~~to 14~~, wherein the material is used in biohybrid or bioartificial organs.

16. (Currently Amended) ~~Use~~ Material according to claim 15, wherein the material is a membrane with immobilized organ cells, such as liver, pancreas, lung cells, and wherein the cells are separated from the fluid stream.

17. (Currently Amended) ~~Use~~ Material according to ~~any of the preceding~~ claims 11 ~~to 14~~, wherein the material is used for medical applications within the body, such as implants or biosensors.

18. (Currently Amended) Membrane, film or coating essentially made up of a composition according to any one of claims 1 ~~to 5~~.

19. (Currently Amended) Membrane, film or coating comprising a blend of a composition according to ~~any one of~~ claims 1 ~~to 5~~ and poly-acrylonitrile (PAN).

20. (Currently Amended) Membrane according to claims 18 ~~or 19~~ being formed by a phase-inversion process.

21. (Currently Amended) Membrane according to ~~any one of preceding~~ claims 18

~~to 20~~, wherein the membrane is an asymmetric membrane, comprising an outer dense layer having an average pore size of 1 to 50 nm, particularly of 3 to 20 nm, more particularly of 5 to 12 nm.

22. (Currently Amended) Membrane according to ~~any one of preceding claims 18 to 20~~, comprising a flat or hollow fibre membrane having at least a two-layer cross sectional structure substantially consisting of a dense surface layer and a porous bulk layer having finger-like pores communicating with the dense layer.

23. (Currently Amended) Membrane according to ~~any one of preceding claims 18 to 22~~, having a rate of water flux through the membrane in the range of 1 to 10 l/m²hkPa, particularly of about 2 l/m²hkPa.

24. (Currently Amended) Membrane according to ~~any one of preceding claims 18 to 23~~, having a cut-off in the range of 150 to 1,000 kDa, particularly of 200 to 600 kDa, more particularly of 300 to 400 kDa.

25. (Currently Amended) Method for producing a membrane ~~according to any of preceding claims 18 to 24~~, comprising the steps of

- (a) preparing a casting solution, which contains a polymeric composition according to claims 1 to 5 comprising at least one acrylic copolymer constituted of 90 to 99 mole-% of acrylic (AC) monomer units and of at least one water-soluble comonomer unit dissolved in a suitable solvent;
- (b) casting the solution on a support or extruding the solution through a suitable nozzle; and
- (c) coagulating the cast or the extruded solution in a coagulation bath to form an asymmetric membrane.

26. (Original) Method according to claim 25, wherein the asymmetric membrane is subjected to a wet post-treatment in water or stream.

27. (Currently Amended) Method according to claim 25 ~~or 26~~, wherein the casting solution is prepared to have a solid content of the polymeric composition of 15 to 25 weight-%.

28. (Currently Amended) Method according to ~~any one of preceding~~ claims 25 to 27, wherein the solvent is a polar solvent.

29. (Currently Amended) Method according to ~~any of preceding~~ claims 25 to 28, wherein the coagulation is performed by a wet or wet-dry-wet process.

30. (Currently Amended) Method according to ~~any one of preceding~~ claims 25 to 29, wherein the casting solution is extruded through a tube-in-orifice type nozzle.